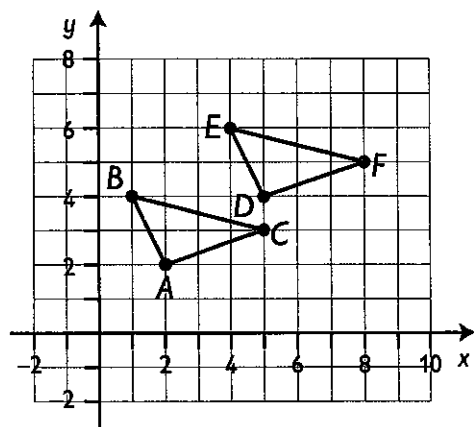


# LESSON 11: DEFINING CONGRUENCE

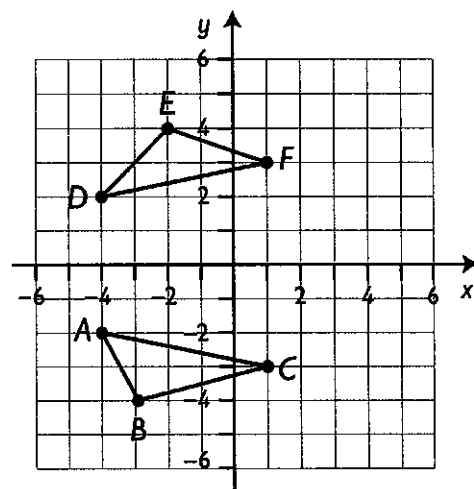
# EXERCISES

## EXERCISES

1. Determine if these two triangles are congruent by showing a sequence of rigid motions that maps  $ABC$  to  $DEF$ .



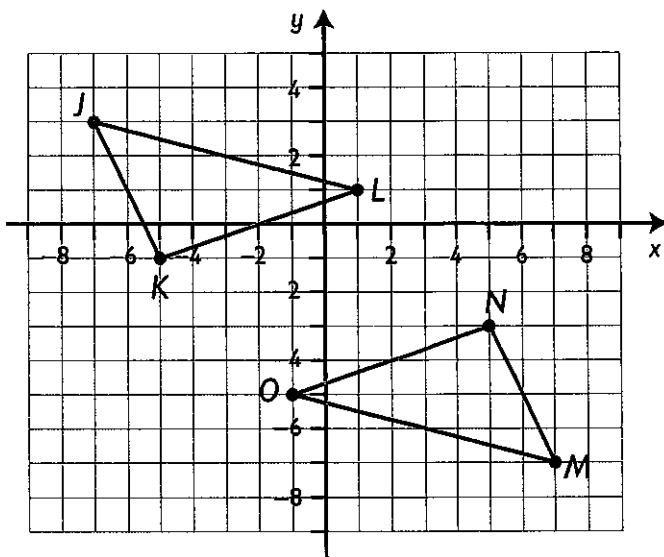
2. Determine if these two triangles are congruent. Describe your method and justify your response.



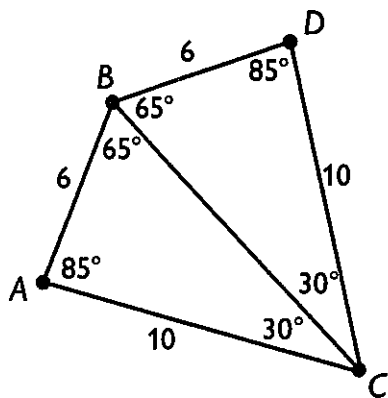
# LESSON 11: DEFINING CONGRUENCE

# EXERCISES

3. Determine if triangle  $JKL$  and triangle  $MNO$  are congruent. Describe your method and justify your response.



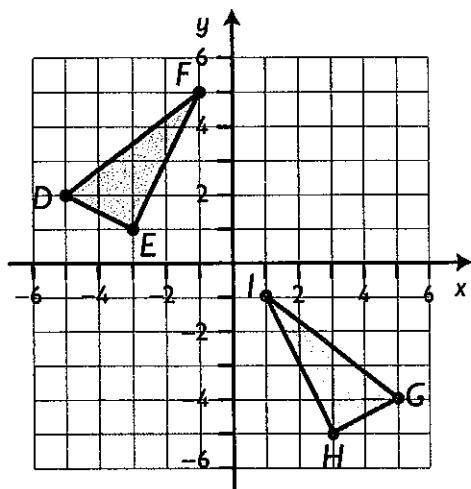
4. Show that the triangle  $ABC$  and triangle  $DBC$  are congruent. Describe your method and justify your response.



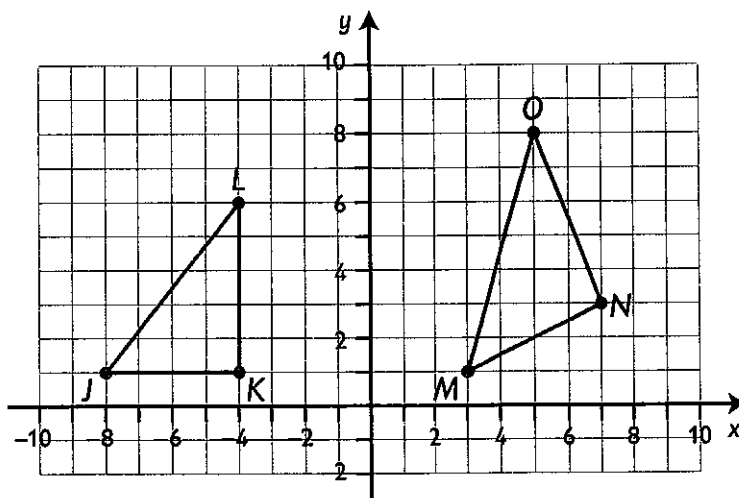
# LESSON 11: DEFINING CONGRUENCE

## EXERCISES

5. Show that figures  $DEF$  and  $GHI$  are congruent by showing each pair of sides and each pair of angles are congruent.



6. Determine whether or not triangles  $JKL$  and  $MNO$  are congruent by showing if each pair of sides and each pair of angles is congruent. If they are not congruent, show how you know.



### Challenge Problem

7. Create a triangle that lies completely in quadrant III, and then create a congruent triangle that is rotated from the original and lies completely within quadrant I.

